## IN THE CLAIMS:

1.

Entry Approved 9/15/06 LDR

2. (Cancelled)

(Cancelled)

- 3. (Cancelled)
- 4. (Cancelled)
- 5. (Cancelled)
- 6. (Cancelled)
- 7. (Cancelled)
- 8. (Cancelled)
- 9. (Previously Presented) An improved machine vision vehicle wheel alignment system including a first camera system configured to view at least one optical target disposed on a first side of a vehicle, a second camera system configured to view at least one optical target disposed on a second side of the vehicle, and a processor configured to process images and to calculate vehicle wheel alignment measurements, the improvement wherein:
- a plurality of reference targets, each of said plurality of reference targets disposed within a field of view of said camera systems;

said first camera system and said second camera system are configured for independent movement relative to each other; and

wherein said processor is configured to utilize images obtained by said first and second camera systems to identify a relationship between at least one of said reference targets and each of said camera systems to establish a common reference coordinate system between said first camera system and said second camera system.